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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,114	03/17/2004	Che-Hsiung Hsu	UC0401USNA	5295

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EXAMINER
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COSTALES, SHRUTI S

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 07/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/803,114

Applicant(s)

HSU ET AL.

Examiner

Shruti S. Costales

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/26/04 & 11/01/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statements (IDS) submitted on July 26, 2004 and November 1, 2004 were filed in compliance with the provisions of 37 CFR § 1.97. Accordingly, the information disclosure statements filed by the applicant have been considered by the Examiner.

### ***Oath/Declaration***

2. The application data sheet filed on March 17, 2004 indicates four inventors, namely, Che-Hsiung Hsu, Huawen Li, Charles Douglas Macpherson, and Hjalti Skulason, which directly conflicts with the information provided on the oath/declaration filed on October 7, 2004 naming only three inventors, namely, Che-Hsiung Hsu, Charles Douglas Macpherson, and Hjalti Skulason. Appropriate clarification or correction is required. See M.P.E.P. § 601.05.

### ***Drawings***

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character not mentioned in the description: 100 shown in FIG. 1. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should

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include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

In addition to Replacement Sheets containing the corrected drawing figure(s), applicant is required to submit a marked-up copy of each Replacement Sheet including annotations indicating the changes made to the previous version. The marked-up copy must be clearly labeled as "Annotated Sheets" and must be presented in the amendment or remarks section that explains the change(s) to the drawings. See 37 CFR 1.121(d)(1). Failure to timely submit the proposed drawing and marked-up copy will result in the abandonment of the application.

### ***Specification***

4. The abstract of the disclosure is objected to because the applicant makes use of legal phraseology, specifically the term "comprising". Further, the applicant does not set forth in detail that which is new in the art and to which the invention pertains.

Appropriate correction is required and no new matter may be added. See MPEP § 608.01(b).

Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the

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patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

5. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: "A composition and a method for making the same, the composition having a polymer selected from at least one polypyrrole and at

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least one polythiophene, at least one colloid-forming polymeric acid, and at least one organic liquid”.

### ***Claim Objections***

6. Claims 4 and 5 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claims, or amend the claims to place the claims in proper dependent form, or rewrite the claims in independent form. More particularly, claims 4 and 5 each recite groups that are not originally recited in claim 3 from which each of claims 4 and 5 depend. For example, claim 4 recites “cycloalkyl” and “cycloalkenyl” that are not originally recited in claim 3, and claim 5 recites “cyano” and “hydroxyl” that are not originally recited in claim 3. Appropriate correction is required.

7. Claims 3-13 and 15-21 are objected to because of the following informalities:

A “The” should replace “A” in the first line of all the recited claims such that “A” composition or process is corrected to “The” composition or process, thereby properly referring back to the independent claims 1 and 14 from which all recited claims directly or indirectly depend, therein providing proper antecedent basis.

### ***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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9. (a) Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. More particularly, claim 2 recites that the composition of claim 1 "further comprises at least one colloid-forming polymeric acid", which has already been disclosed in claim 1. Therefore, it is not clear to one of ordinary skill in the art if the applicant is adding a new colloid-forming polymeric acid in claim 2 which is in addition to the one in claim 1, or if the applicant is referring to the colloid-forming polymeric acid of claim 1.

(b) Claims 3, 4, 5, 7, 8, 10, 12, 15-17, 19-21, and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. More particularly, claims 3, 4, 5, 7, 8, 10, 12, 15-17, 19-21, and 23 improperly recite a Markush group. Consequently, it is impossible to determine which elements of the group are required by the presently cited claims. When materials recited in a claim are so related as to constitute a proper Markush group, they may be recited in the conventional manner, or alternatively. For example, if "wherein R is a material selected from the group consisting of A, B, C and D" is a proper limitation, then "wherein R is A, B, C or D" shall also be considered proper (emphasis added). See MPEP § 2173.05(h). Further, claims 6, 9, 13, and 18 are rejected under 35 U.S.C. 112, second paragraph, as being dependent from a rejected base claim.

(c) Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. More particularly, claim 13 recites "said polymeric sulfonic acid" referring to claim 12, wherein no polymeric sulfonic acid is recited in claim 12, therefore there is insufficient antecedent basis for this limitation in the claim. It is suggested that the dependency of claim 13 be changed from claim 12 to claim 10 in order to comply with the requirements of antecedent basis under 35 U.S.C. 112, second paragraph.

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

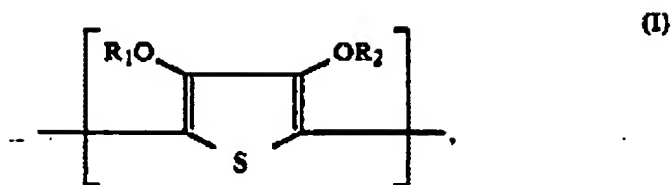
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1-4, 8-11, 14-16, 19, and 22-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Jonas et al. (U.S. Patent Number 5,300,575), hereinafter referred to as Jonas.

Jonas discloses polythiophene dispersions, their production and, use of the salts for the antistatic treatment of plastic moldings and as organic conductors in electronic equipment and capacitors (Col. 1, lines 7-14). It is also disclosed that the polythiophene is represented by formula (I):





wherein  $R_1$  and  $R_2$  independently represent hydrogen or a  $C_{1-4}$  alkyl group or, together, represent an optionally substituted  $C_{1-4}$  alkylene group, preferably an optionally alkyl-substituted methylene group, an optionally  $C_{1-2}$  -alkyl- or phenyl-substituted 1,2-ethylene group, a 1,3-propylene group or a 1,2-cyclohexylene group (Col. 2, lines 12-44).

Further, the preferred representatives of the optionally substituted  $C_{1-4}$  alkylene groups, which  $R_1$  and  $R_2$  may form together, are the 1,2-alkylene groups which are derived from the 1,2-dibromoalkanes obtainable by bromination of  $\alpha$ -olefins, such as ethane, prop-1-ene, hex-1-ene, oct-1-ene, dec-1-ene, dodec-1-ene and styrene, and other representatives are the 1,2-cyclohexylene, 2,3-butylene, 2,3-dimethyl-2,3-butylene and 2,3-pentylene groups (Col. 2, lines 12-44).

The dispersion contains polyanions such as polymeric carboxylic acids, including polyacrylic acids, polymethacrylic acids or polymaleic acids, and polymeric sulfonic acids, such as polystyrene sulfonic acids and polyvinyl sulfonic acids, wherein these polycarboxylic and polysulfonic acids may also be copolymers of vinyl carboxylic and vinyl sulfonic acids with other polymerizable monomers, such as acrylates and styrene (Col. 2, lines 45-66). Solvents are also disclosed including lower alcohols like methanol, ethanol, or isopropanol as well as mixtures of water with said lower alcohols with other water-miscible organic solvents like acetone (Col. 2, lines 1-4). The solids content of the dispersion is in the range of 0.5 to 55% by weight, inherently including 45 to 99.5%

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by weight of solvent (Col. 4, lines 32-37). Jonas also discloses that the polythiophene composition has a pH of 8 (Col. 5, lines 65-66).

Jonas also discloses that for polymerization, the thiophenes, polyacid and oxidizing agent are dissolved in an organic solvent or, preferably, in water, inherently forming an aqueous dispersion in water that may also include the organic solvent, and the resulting solution is stirred at the polymerization temperature envisaged until the polymerization reaction is complete, wherein the compositions obtained after polymerization may be directly used for the antistatic treatment of plastic moldings after removal of the solvent, for example water, the antistatic layer from the polythiophene is directly obtained, remaining antistatic in the presence of atmospheric moisture (Col. 3, lines 19-47). Oxidizing agents used during polymerization include any oxidizing agents suitable for the polymerization of pyrrole, such as iron(III) salts –  $\text{FeCl}_3$ , etc. (Col. 3, lines 48-68 and Col. 4, lines 1-21). Further, it is disclosed by Jonas that after drying or in other words the removal of water, which would inherently include drying the polymerized dispersion to a partially dried solid state, the polythiophene dispersions including the organic solvent are applied to plastic moldings in layers to be antistatically treated (Col. 4, lines 50-55).

Jonas also discloses a photosensitive multilayer structure at Col. 8, line 16 inherently including photosensors, photoswitches, phototransistors, photoconductive cell, photoresistors, phototubes, photovoltaic devices, and photo diodes, in addition to organic conductors in electronic equipment and capacitors (Col. 1, lines 7-14). It is to be noted that “a generic claim cannot be allowed to an applicant if the prior art discloses

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a species falling within the claimed genus", and the species in that case will anticipate the genus. *In re Slayter*, 276 F.2d 408, 411, 125 USPQ 345, 347 (CCPA 1960); *In re Gosteli*, 872 F.2d 1008, 10 USPQ2d 1614 (Fed. Cir. 1989).

In light of the above discussion, it is clear that the presently cited claims are anticipated.

### ***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

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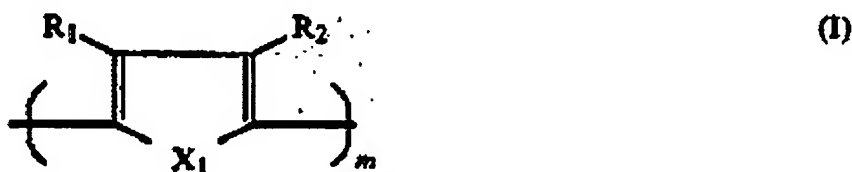
under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claims 1-12, 14-17, 19, and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jonas in view of Han et al. (U.S. Patent Number 5,185,100), hereinafter referred to as Han, and Hsu et al. (U.S. Pre-Grant Publication Number 2004/0127637), hereinafter referred to as Hsu.

The discussion above regarding Jonas in paragraph 11 is herein incorporated by reference.

The difference between Jonas and the presently claimed invention is (a) a polypyrrole having a specified structure, and (b) additional components such as carbon nanoparticles.

With respect to the difference in (a), Han, which is drawn to electrically conductive polymers (Col. 1, lines 8-16) including blend of polythiophene and polypyrrole (Col. 3, line 42), discloses polypyrroles represented in formula (I) (See Col. 3, lines 25-67; Col. 4, lines 1-67; and Col. 5, lines 1-30):



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wherein, m is at least 20, R<sub>1</sub> and R<sub>2</sub> are the same or different at each occurrence and are hydrogen or isotopes thereof, hydroxyl, alkyl, alkenyl, aryl, alkoxy, cycloalkyl, cycloalkenyl, alkanoyl, alkylthio, aryloxy, alkylthioalkyl, alkynyl, alkylaryl, arylalkyl, amido, alkylsulfinyl, alkoxyalkyl, alkylsulfonyl, aryl, arylamino, diarylamino, alkylamino, dialkylamino, phosphoric acid, alkylarylamino, arylthio, heteroaryl, arylsulfinyl, alkoxycarbonyl, arylsulfonyl, carboxylic acid, halogen, nitro, cyano, sulfonic acid, or alkyl or phenyl substituted with one or more of sulfonic acid (or derivatives thereof), phosphoric acid (or derivatives thereof), carboxylic acid (or derivatives thereof), halo, amino, nitro, hydroxyl, cyano or epoxy moieties (Col. 5, lines 31-51; see also Col. 5, lines 52-68, Col. 6, lines 1-68, Col. 7, lines 1-68, and Col. 8, lines 1-66). X<sub>1</sub> is NR<sub>17</sub>, wherein R<sub>17</sub> includes hydrogen, methyl, ethyl, propyl, hexyl, octyl, nonyl, phenyl, benzyl, vinyl, allyl, dodecylphenyl, phenethyl, phenylpropyl, 2,4-dimethylphenyl, 4-methylphenyl and the like (Col. 6, lines 1-64; see also Col. 5, lines 52-68, Col. 6, lines 1-68, Col. 7, lines 1-68, and Col. 8, lines 1-66). Han also discloses that R<sub>1</sub> and R<sub>2</sub> together may form an alkylene, alkenylene, or alkynylene group completing a 4, 5, 6, 7, 8, 9 or 10 membered aromatic or alicyclic carbon ring, which ring may optionally include one or more degrees of unsaturation or one or more heteroatoms of oxygen, nitrogen, or (Col. 7, lines 43-68 and Col. 8, lines 1-2). It would have been obvious to one of ordinary skill in the art to use the polypyrrole of Han in the dispersion of Jonas because the electrically conductive polymer may be used to form electrically conductive articles such as antistatic coatings (Col. 13, lines 61-68 and Col. 14, lines 1-13), thereby obtaining the invention as set forth in the presently cited claims.

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With respect to the difference in (b), Hsu, which is drawn to aqueous dispersions of electrically conducting polymers of aniline polymerized in the presence of polymeric acid colloids (Page 1, paragraph [0001]), discloses additives such as metal particles, nanoparticles, nanowires, carbon nanotubes, graphite fibers and nanoparticles, carbon particles, and combinations thereof (Page 6, paragraph [0062]). It would have been obvious to one of ordinary skill in the art to use the additives of Hsu in the polythiophene dispersion composition of Jonas because these additives are highly conductive (Page 6, paragraph [0062]), rendering the composition highly conductive, thereby obtaining the invention as set forth in the presently cited claims.

14. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jonas in view of Han, and Hsu as applied to claims 1-12, 14-17, 19, and 21-23 above, and further in view of Hsu et al. (U.S. Pre-Grant Publication Number 2004/0254297), hereinafter referred to as '297.

The discussion above regarding Jonas, Han, and Hsu in paragraphs 11 and 13 is herein incorporated by reference.

The difference between Jonas, Han, and Hsu and the presently claimed invention is a perfluoroalkylenesulfonic acid.

Jonas discloses the use of polymer sulfonic acid but does not explicitly disclose perfluoroalkylenesulfonic acid, however, '297, which is drawn to aqueous dispersions of electrically conducting polymers of thiophene (Page 1, paragraph [0002]), discloses in paragraph [0071] of the specification a perfluoroalkylenesulfonic acid. The motivation

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for using said perfluoroalkylenesulfonic acid is to produce a composition with superior electrical properties (paragraph [0042]). It would have been obvious to one of ordinary skill in the art to use the perfluoroalkylenesulfonic acid of '297 because it is a colloid-forming polymeric acid (Page 4, paragraph [0071]) that produces compositions with superior electrical properties and thus is suitable for making the polythiophene dispersion disclosed by Jonas, thereby obtaining the invention as set forth in the presently cited claim.

15. Claims 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jonas in view of Han, and Hsu as applied to claims 1-12, 14-17, 19, and 21-23 above, and further in view of Facci et al. (U.S. Patent Number 5,258,461), hereinafter referred to as Facci.

The discussion above regarding Jonas, Han, and Hsu in paragraphs 11 and 13 is herein incorporated by reference.

The difference between Jonas, Han, and Hsu and the presently claimed invention is an organic solvent having a boiling point of at least 100° C including solvents such as N-methylpyrrolidone, ethylene glycol, dimethylacetamide, dimethyl formamide, dimethylsulfoxide, and combinations thereof.

Facci, which is drawn to polymeric films for use as belts in an electrophotographic imaging member (Col. 1, lines 6-11), discloses liquid dispersion media, or solvents, for dissolving polymer, wherein the solvents include N-methylpyrrolidone, ethylene glycol, dimethylacetamide, dimethyl formamide, and

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dimethylsulfoxide (Col. 8, lines 18-56; Col. 9, lines 46-68; and Col. 10, lines 1-18), wherein the polymer is a suitable film forming thermoplastic polymer capable of forming a dispersion of electrically charged thermoplastic film forming particles in an organic liquid (Col. 7, lines 15-18). It is to be noted that as the solvents of Facci are the same as the presently claimed solvents, the boiling point of the solvents would intrinsically be at least 100° C. It would have been obvious to one of ordinary skill in the art to use the solvents of Facci in the dispersion of Jonas because the conductivity of the dispersion may be altered to a desired value (Col. 9, lines 40-45), thereby obtaining the invention as set forth in the presently cited claims.

### ***Double Patenting***

16. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

17. Claims 1, 3-4, and 7-13 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-8 of



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copending Application No. 10/802,704. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following explanation.

The copending application '704 recites a polythiophene identical to that presently claimed, at least one colloid-forming polymeric acid, and at least one co-dispersing liquid such as alcohols

The difference between '704 and the presently claimed invention is (a) an aqueous dispersion, and (b) a perfluoroalkylenesulfonic acid.

With respect to the difference in (a), in light of the open language of the present claims, i.e., "comprising", the present claims are open to the inclusion of additional ingredients including water, which would intrinsically form a dispersion with the other ingredients recited in the presently cited claims. In light of the preceding, it would have been obvious to one of ordinary skill in the art that the present claims are open to the inclusion of water and thus an aqueous dispersion. Thus, one of ordinary skill in the art would arrive at the present invention from the copending application '704.

With respect to the difference in (b), copending application broadly discloses the use of polymeric sulfonic acid that is perfluorinated, however, there is not explicit disclosure of perfluoroalkylenesulfonic acid as presently claimed.

Applicants attention is drawn to M.P.E.P. § 804 where it is disclosed that "the specification can always be used as a dictionary to learn the meaning of a term in a patent claim." *In re Boylan*, 392 F. 2d 1017, 157 USPQ 370 (CCPA 1968). Further, those portions of the specification which provide support for the patent claims may also be examined and considered when addressing the issue of whether a claim in an

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application defines an obvious variation of an invention claimed in the patent.

(Emphasis Added). *In re Vogel*, 422 F. 2d 438, 164 USPQ 619, 622 (CCPA 1970).

Consistent with the above underlined portion of the M.P.E.P. citation, attention is drawn to paragraph [0071] of the specification of '704, which discloses that the fluorinated polymeric sulfonic acid includes perfluoroalkylenesulfonic acid. In light of the foregoing, it would have been obvious to one of ordinary skill in the art to use perfluoroalkylenesulfonic acid in copending application '704, thus arriving at the presently cited claims from the said copending application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

18. Claims 1, 3-4, and 7-13 are directed to an invention not patentably distinct from claims 1-8 of the commonly assigned copending application, namely 10/802,704.

Specifically, refer to the discussion above in paragraph 17.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP § 2302). Commonly assigned copending Application No. 10/802,704, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions

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were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications filed on or after November 29, 1999.

19. Claims 1, 3-4, and 7-13 are provisionally rejected under 35 U.S.C. 103(a) as being obvious over copending Application No. 10/802,704 which has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the copending application, it would constitute prior art under 35 U.S.C. 102(e) if published or patented. This provisional rejection under 35 U.S.C. 103(a) is based upon a presumption of future publication or patenting of the conflicting application. Please refer to the discussion above in paragraph 17.

This provisional rejection might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the copending application was derived from the inventor of this application and is thus not the invention "by another," or by a showing of a date of invention for the instant application prior to the effective U.S. filing date of the copending application under 37 CFR 1.131. This rejection might also be overcome by showing that the copending application is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2).

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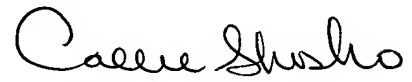
**Conclusion**

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shruti S. Costales whose telephone number is (571) 272-8389. The examiner can normally be reached on Monday - Friday, 6:30 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

SSC  
Shruti S. Costales  
July 14, 2005

  
CALLIE E. SHOSHO  
PRIMARY EXAMINER